

NUMBER: 06-01 DATE: November 28, 2016

REVISIONS: 11/1/2006, 06/27/2013

SIGNED: Sugge a Sundation ISSUED BY: City Manager

SUBJECT: SOIL EROSION AND SEDIMENTATION CONTROL PROCEDURES

PURPOSE: Pursuant to Part 91, Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act, 1994 PA 451. as amended (Part 91) an SESC permit is typically required for any earth change that disturbs one or more acres or is within 500 feet of the water's edge of a lake or stream. However, a state, county, and municipal agency may apply to the Department of Environmental Quality (DEQ) for designation as an Authorized Public Agency (APA) under the authority of Section 9110 of Part 91 and if designated an APA, the agency is granted the privilege to undertake earth change activities without having to obtain SESC permits from the appropriate county or municipal enforcing agency. The APA designation does not, however, negate the need for obtaining all other applicable federal, state, and local permits prior to starting the earth work.

> These procedures have been submitted to the DEQ by the City of Grand Rapids in partial fulfillment of the requirements to be designated an APA. If these procedures are approved, the agency will undertake all earth change activities in accordance with the requirements set forth in these procedures. All requirements of Part 91 and the administrative rules (Rules) promulgated under the authority of Part 91 are included in these procedures by reference.

POLICY:

The Authorized Public Agency (APA) will anticipate, and plan for potential SESC problems associated with all phases of a project, including clearing, rough grading, construction, final grading, restoration, and continuing site maintenance. All earth work will be performed in accordance with a comprehensive SESC plan which meets the

requirements of Rule 323.1703 or will be done in accordance with approved maintenance guidelines referenced in these procedures.

A copy of these procedures will be provided to all Agency and contract personnel engaged in or responsible for implementing the Agency's SESC Program. Those personnel are expected to understand and implement the contents of these procedures. Standards and specifications referenced in these procedures will be made available to all Agency and contract personnel.

These SESC procedures are subject to continuous review by Agency staff and the DEQ and will be revised as standards and techniques for SESC evolve or when the Agency changes how they perform earth change activities. Any revisions to these procedures must be reviewed and approved by the DEQ prior to formal adoption by the Agency.

All Agency or contract personnel who are responsible for conducting inspections or independently implementing SESC measures must have a valid Construction Stormwater Operator certificate issued by the DEQ under the authority of Section 9123 of Part 91. In addition, all Agency personnel who are responsible for developing or approving SESC plans are required to have the Soil Erosion Plan Review and Design certification. The positions requiring the Soil Erosion Plan Review and Design certification include the Project Engineers assigned to stormwater, the Hydraulic Engineer, Utility Field Operations Supervisors, Utility Field Operations Superintendent, and the Engineering Assistant I's assigned to soil erosion inspection in the Environmental Services Department. The Construction Stormwater Operator training requirement includes Agency personnel in the following positions:

Neighborhood Improvement Department

Plans Examiner

Environmental Services Department:

Hydraulic Engineer
Project Engineer (Assigned to stormwater)
Utility Field Operations Supervisor
Engineering Assistant I (Assigned to soil erosion)
Utility Field Operations Crew Leader
Utility Field Operations Superintendent

Parks Department

Groundkeeper
Building Maintenance Supervisor
Project Manager
Parks Superintendent

Water System

Plumbing Inspector
Utility Field Operations Supervisor
Utility Field Operations Crew Leader
Utility Field Operations Superintendent

Public Services Department
Public Services Supervisor

Engineering Department
Assistant City Engineer
Assistant Project Manager
Civil Engineer 1

<u>Traffic Safety Department</u>
Signals & Lighting Superintendent

STANDARDS AND SPECIFICATIONS

The most recent versions of the documents listed below are available at the Agency and guide the implementation of the SESC measures used by the Agency:

- 1. Michigan Department of Transportation Specifications for SESC, including:
 - a. The most recent edition of Standard Specifications for Construction
 - b. Soil Erosion and Sedimentation Control Measures, *Standard Plan R-96-C*, or subsequent revisions
 - c. Soil Erosion and Sedimentation Control Manual
- 2. Michigan Department of Environmental Quality, *Guidebook of Best Management Practices for Michigan Watersheds.*
- 3. Michigan Department of Management and Budget, *Soil Erosion and Sedimentation Control Guidebook*.
- 4. The manufacturer's standards and specifications
- 5. City of Grand Rapids Stormwater Ordinance Chapter 32 & Chapter 67.

PLANNING AND DESIGN

Effective control of erosion and off-site sedimentation begins with planning. All earth work will be planned and designed in a manner that limits the amount and duration of exposed soil for the shortest period of time. During the planning and design process, the Agency commits to the following:

- 1. Develop a comprehensive SESC plan in accordance with Rule 323.1703 (Attachment 1) for all earth change activities that disturb one or more acres or are within 500 feet of the water's edge of a lake or stream. The plan will clearly show the physical earth change limits of the project; location and installation details for all SESC measures; timing and sequencing schedule which identifies the installation schedule and maintenance requirements of each temporary and permanent SESC measure.
- 2. Clarify in all plans, guidelines, or bid documents that:

- a. Temporary SESC measures shall be installed prior to, or upon commencement of, the earth change activity and that the temporary SESC measures will be removed only after permanent SESC measures are in place and the site is stabilized.
- b. Permanent SESC measures will be installed within five (5) calendar days after final grading or completion of the final earth change. If permanent stabilization of a disturbed area is not possible upon completion of the earth change, temporary SESC measures will be maintained until the site is stabilized. If vegetation cannot be established until the next growing season, other prescribed SESC measures will be implemented to temporarily stabilize the site until the next growing season.

EARTH WORK

All earth work, including the installation and maintenance of SESC measures, will be done in accordance with the SESC plan developed for the project or guidelines approved in these procedures. Implementation of the temporary and permanent SESC measures will be done in accordance with the details and construction schedule in the plan, guidelines or special provisions. In addition to, or in conjunction with, the requirements set forth in the plans and guidelines, the Agency commits to the following:

- 1. Install temporary SESC measures before or upon commencement of the earth change.
- 2. Protect all storm water inlets that may be impacted by sediment. Care must be taken to not cause street flooding.
- Maintain temporary SESC measures on a daily basis.
- 4. Install permanent SESC control measures within 5 calendar days after final grading or the final earth change has been completed.
- Contain sediment on-site.
- 6. Minimize dust and the off-site tracking of sediment. Sediment tracked onto the street will be removed daily.
- 7. Vegetative filters will be maintained whenever feasible, in conjunction with using silt fence, when working adjacent to lakes, streams, and wetlands.
- 8. Excess soil will be temporarily stockpiled in upland areas and contained on-site.
- 9. All earth work will be done in the dry by placing cofferdams or other similar structures around the work area when working in lakes, streams, and wetlands.

INSPECTIONS

Agency or contract personnel with a valid SESC training certificate issued under the authority of Section 9123 of Part 91 will be responsible for periodically inspecting and documenting the condition of the individual SESC measures and general site conditions. All sites will be inspected and conditions documented at least weekly and within 24 hours of a rain event that results in a discharge of water off the site from the beginning of the earth work until the site is stabilized.

If an inspector finds a condition that is or could result in a violation of Part 91, the Part 91 rules, or these procedures, he/she will identify the problem(s), determine the necessary corrective actions, and specify the time to correct the problem(s) on the inspection report form. Any problem that results, or could result, in a discharge of sediment to a lake, stream, or wetland shall be corrected within 24 hours of the inspection. All other identified problems will be corrected within 5 days.

MAINTENANCE OF SESC CONTROL MEASURES

Maintenance includes implementing necessary repairs or corrections to the temporary SESC measures during construction and to the permanent SESC measures after the project is completed. Temporary SESC measures shall be maintained daily until permanent controls are implemented and the site is stabilized.

Permanent control measures in need of repair shall be corrected as soon as possible, but always within five (5) days of detection of the problem, unless the scope of the work or the season prevents such action, then temporary controls will be implemented and maintained until the permanent measures are repaired and the site stabilized.

ROUTINE MAINTENANCE OR EMERGENCY REPAIR ACTIVITIES

Routine maintenance activities are subject to the same SESC considerations and requirements as any other earth change activity undertaken by, or on behalf of, the Agency. Typical routine maintenance or emergency repair activities include, but are not limited to, the following:

- 1. Water main repairs
- 2. Sewer repairs
- 3. Park maintenance when an earth cut is required.
- 4. Street lighting repairs
- 5. Curb & Gutter repairs
- 6. Sidewalk repairs
- 7. Trench repairs
- 8. Street repairs

In lieu of developing formal SESC plans, the Agency will undertake the above listed activities in accordance with the following guidelines:

1. Contact an SESC certified Supervisor or crew leader.

- 2. Leave at least 50 feet of natural vegetation between the terminus of ditching and any lake, stream or wetland.
- 3. If the retained vegetation is not adequate to filter sediment from runoff, install temporary or permanent check dams, sediment traps, or both.
- 4. If it is necessary to remove the vegetated filter described in (2), do so only after the remainder of the ditch is revegetated and stabilized.

COMPLIANCE AND ENFORCEMENT

The Agency is responsible to ensure that all earth work undertaken by, or on behalf of it, is in compliance with Part 91, the Part 91 rules, and these procedures. All contracts let by the Agency will contain clear language describing the responsibility of contractors to comply with these procedures and the consequences of noncompliance. The individual within the Agency that is ultimately responsible for ensuring compliance with these procedures is, the City Manager or their designee.

The following actions will be taken by the Agency to ensure compliance:

Projects Undertaken by Agency Staff:

- 1. Train all individuals responsible for implementing and enforcing the Agency's Part 91 SESC Program.
- Issue department supervisor in charge of that area a Corrective Action Order to correct deficiencies within a specified time and send a copy of that notice to MDEQ and Labor Relations.
- 3. Arrange for others to do the work by contracting out the required work.

Projects Undertaken by Contractors:

- 1. Require an Authorization to Proceed with Earth Change, bond, letter of credit, or other surety to cover the cost of implementing and maintaining the temporary and permanent SESC measures. Include in the contract that the contractor will be responsible for any fines, fees or cost to the City for failure to comply with the Authorization to Proceed with Earth Change or other violations of Article 5 of Title II of the Code of the City of Grand Rapids, "Soil Erosion and Sedimentation Control."
- The Engineering Department will include separate line item values for the
 installation, maintenance, and removal of temporary and permanent SESC
 measures. Failure to implement and maintain the SESC measures per the
 SESC plan and contract will result in, a Civil Infraction Ticket, withholding
 payment, stopping work, or using the line item value to pay another company to
 implement SESC measures.

- 3. Include in the contract language that failure to perform in accordance with Part 91, the Part 91 rules, and these procedures will result in the contractor not being allowed to bid on future Agency projects for a period of two years and/or a doubling of the size of the surety that would otherwise be normally required.
- 4. Regardless if the contractor is responsible for doing inspections, an Agency inspector will inspect the site at least on a monthly basis and within 24 hours of a significant rain which results in runoff from the site.